Applicant: Hugh R. Sharkey et al. Attorney's Docket No.: 14170-043002 / 25-31-0023

Serial No.: 09/664,473

Filed: September 18, 2000

Page : 2 of 5

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1-56. (cancelled)

57. (currently amended) A method, comprising:

applying a controlled amount of RF thermal energy *in vivo* to vascularized, densely collagenous tissue of at least a portion of a ligament, tendon or joint capsular tissue which interconnects naturally joining portions of a body to thermally modify the tissue to achieve a controlled modification of a geometry of the tissue.

- 58. (previously presented) The method of claim 57 further comprising heating the tissue with the applied thermal energy to a temperature in the range of about 45 to 75°C.
- 59. (previously presented) The method of claim 57 further comprising heating the tissue with the applied thermal energy to a temperature in the range of about 50 to 70°C.
- 60. (previously presented) The method of claim 57 further comprising heating the tissue with the applied thermal energy to a temperature in the range of about 55 to 65°C.
- 61. (previously presented) The method of claim 57 wherein applying includes advancing a probe having an electrode to a surgical site containing the tissue.
- 62. (previously presented) The method of claim 61 further comprising deflecting a distal end of the probe.

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Serial No.: 09/664,473

Filed: September 18, 2000

Page : 3 of 5

63. (previously presented) The method of claim 62 further comprising moving a distal end of the probe over the tissue in painting strokes.

- 64. (previously presented) The method of claim 57 wherein the tissue comprises at least a portion of a medial side ligament of a patella.
- 65. (previously presented) The method of claim 57 wherein the tissue comprises at least a portion of a patella tendon allograft.
- 66. (previously presented) The method of claim 57 wherein modifying the geometry of the tissue includes increasing a cross-sectional diameter of collagen fibrils of the tissue and decreasing a longitudinal length of collagen protein molecules of the tissue.
- 67. (new) The method of claim 57 further comprising the step of: insulating at least some tissue near the vascularized, densely collagenous tissue of at least a portion of a ligament, tendon or joint capsular tissue.